

FIG. 1

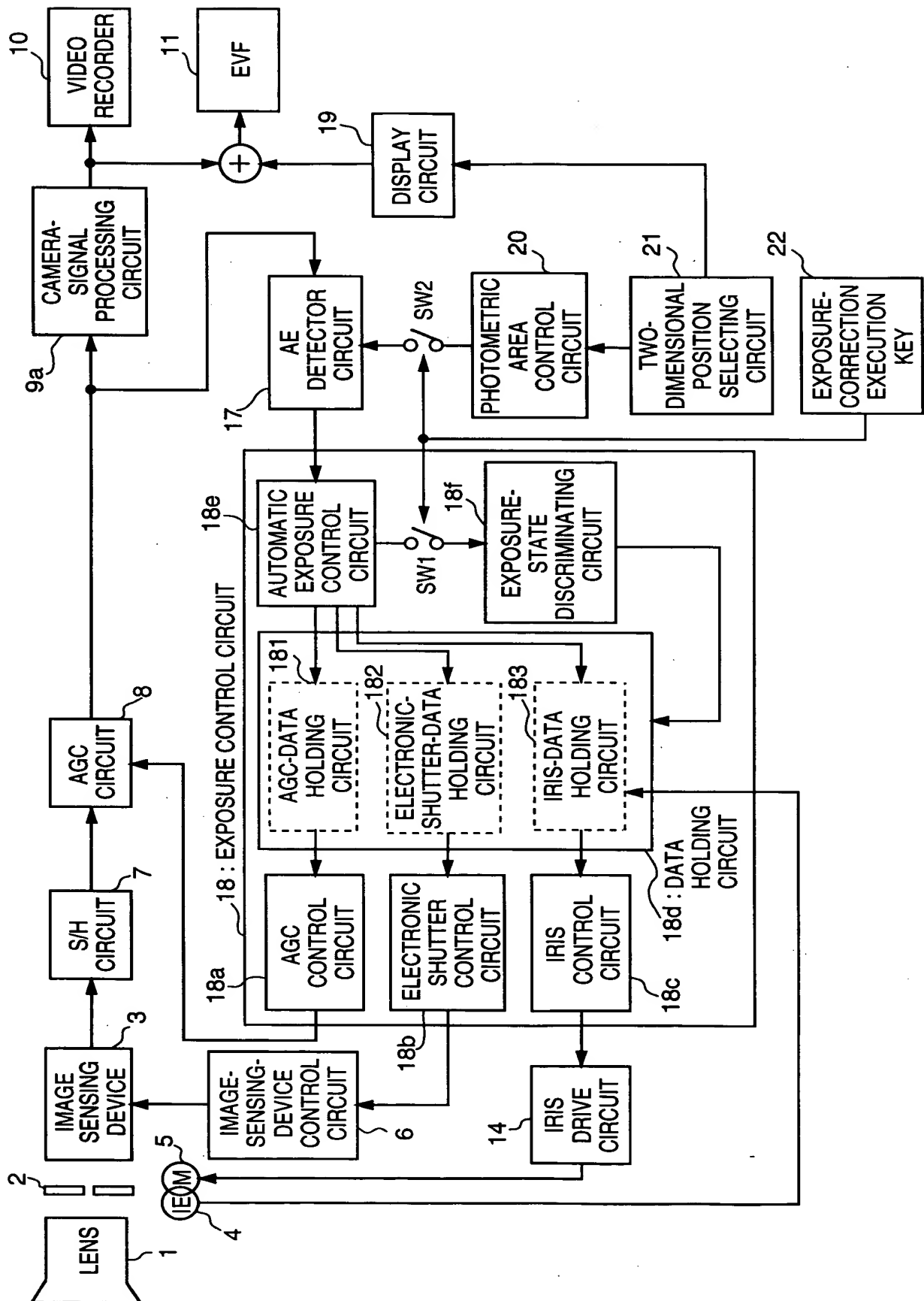


FIG. 2

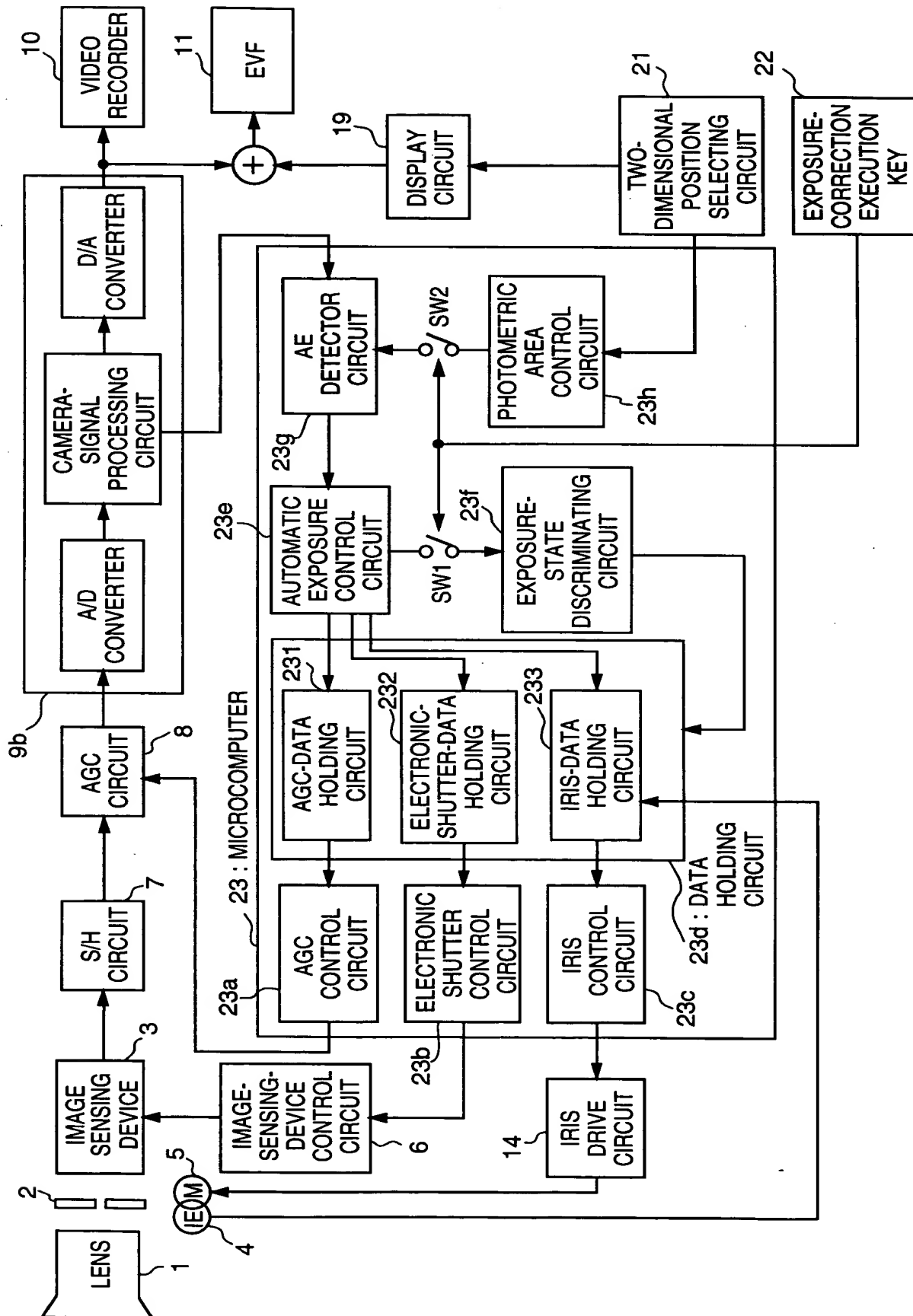


FIG. 3

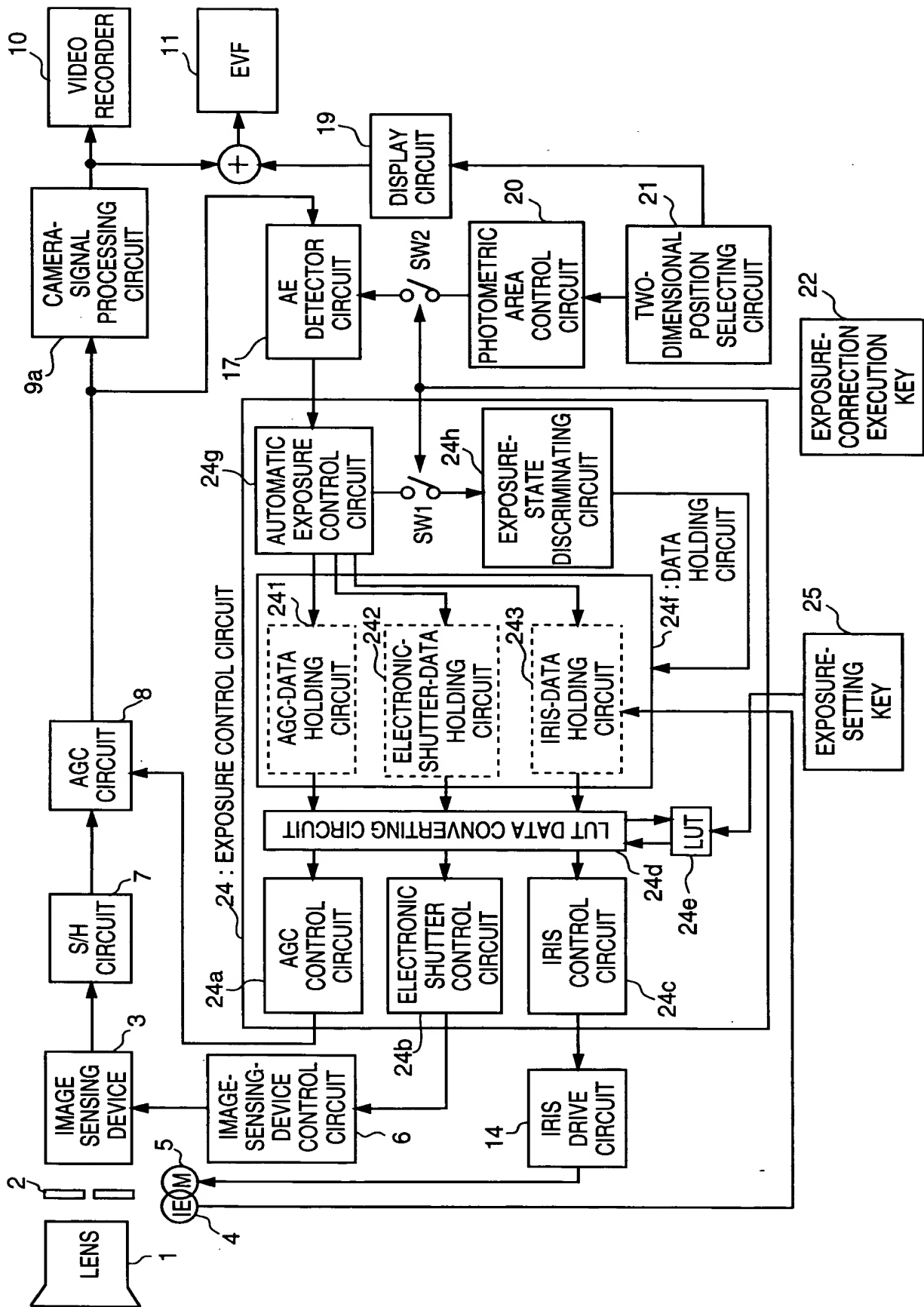


FIG. 4

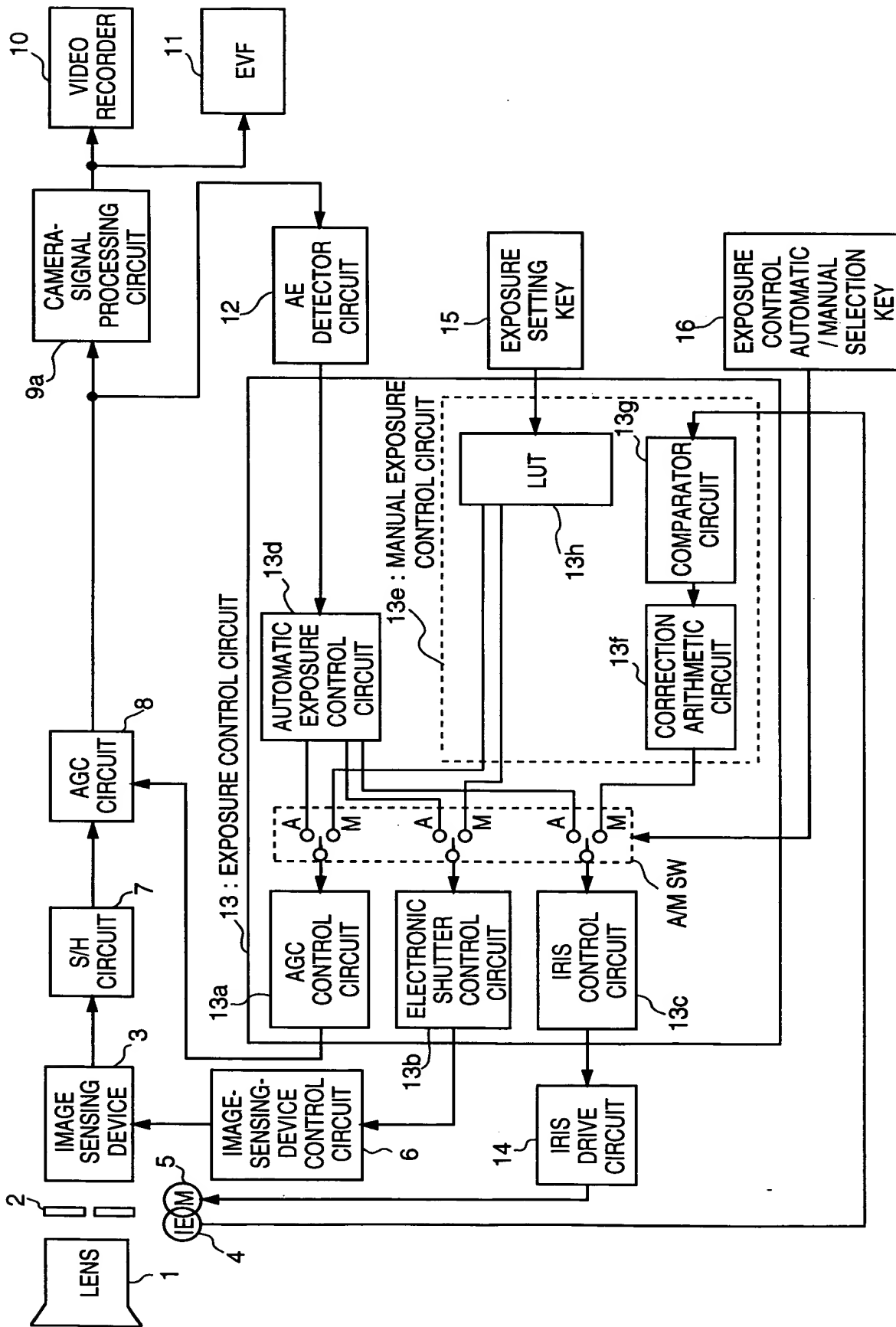


FIG. 5

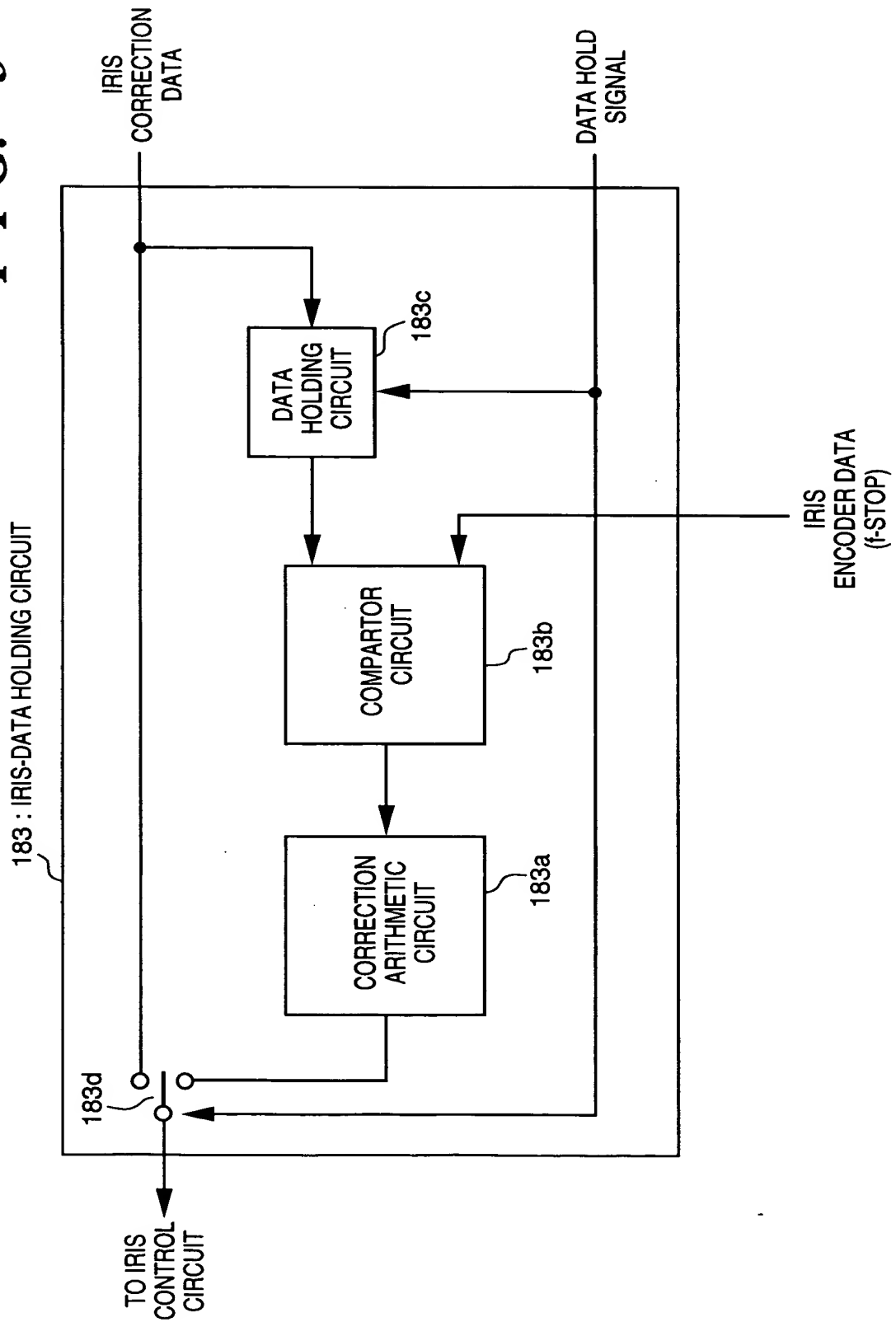


FIG. 6

① LUT EXAMPLE 1

DATA No.	IRIS DATA
data1	OPEN
data2	F2.8
data3	F4
data4	F5.6
data5	F8
data6	F11
data7	F16
data8	F22
data9	F32
data10	CLOSE

② LUT EXAMPLE 2

DATA No.	IRIS DATA	AGC DATA	SHUTTER DATA
data1	OPEN	MAX	1/60
data2		18dB	
data3		12dB	
data4		6dB	
data5		0dB	
data6	F2.8		
data7	F4		
data8	F5.6		
data9	F8		
data10	F11		
data11	F22		
data12	F32		
data13			1/100
data14			1/250
data15			1/500
data16			1/1000
data17	CLOSE		

FIG. 7C

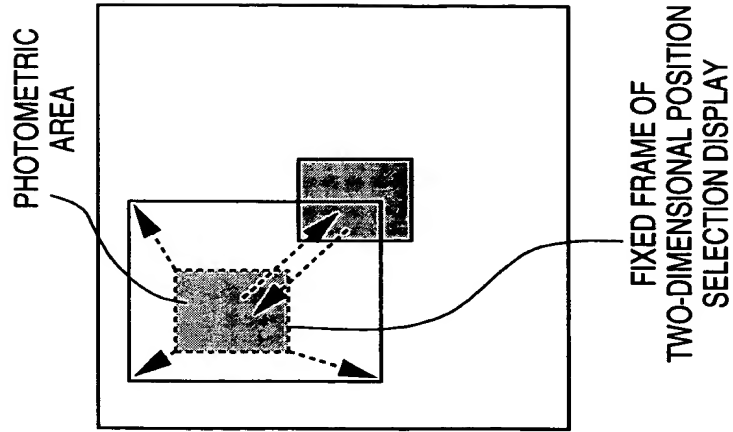


FIG. 7B

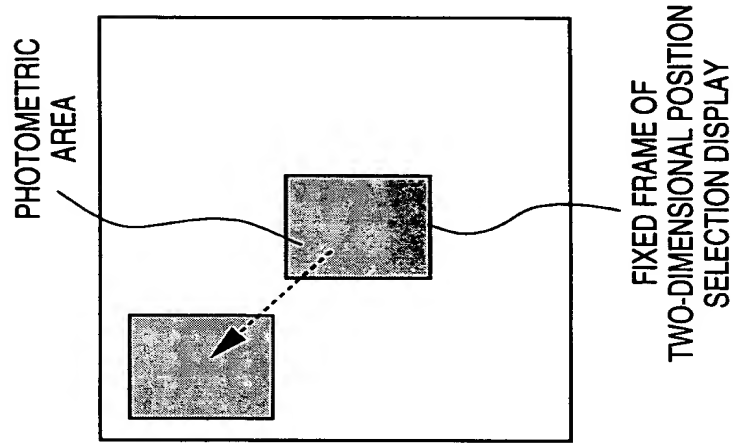
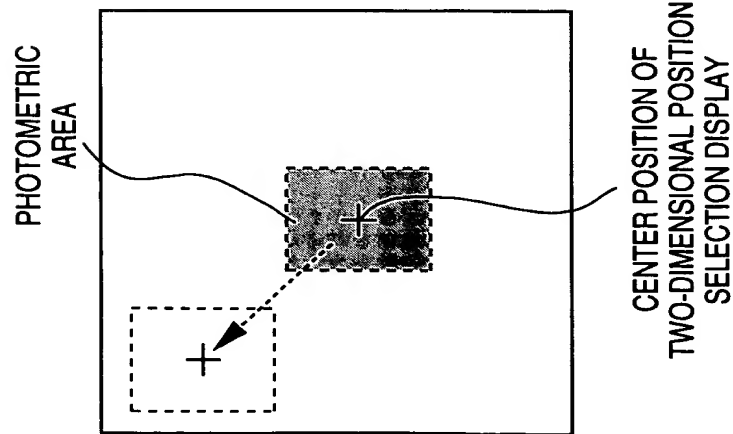


FIG. 7A



The diagram illustrates a video camera system with exposure correction. The main components and their interconnections are as follows:

- Input and Initial Processing:** A **LENS** (1) is connected to an **IMAGE SENSING DEVICE** (3). The output of the image sensing device goes through an **S/H CIRCUIT** (7) and an **AGC CIRCUIT** (8) to an **IMAGE INFORMATION DETECTING CIRCUIT** (124).
- Control and Feedback:** The **IMAGE INFORMATION DETECTING CIRCUIT** (124) is connected to an **IMAGE INFORMATION MEMORY CIRCUIT** (123). The **IMAGE INFORMATION MEMORY CIRCUIT** (123) provides feedback to the **AGC CIRCUIT** (8) and the **EXPOSURE CONTROL CIRCUIT** (18). The **IMAGE INFORMATION DETECTING CIRCUIT** (124) also outputs to a **CAMERA-SIGNAL PROCESSING CIRCUIT** (9a).
- Exposure Control Block (18):** This block contains several sub-circuits:
 - AGC CONTROL CIRCUIT** (18a) and **ELECTRONIC SHUTTER CONTROL CIRCUIT** (18b) receive signals from the **IMAGE-SENSING-DEVICE CONTROL CIRCUIT** (6).
 - IRIS DRIVE CIRCUIT** (14) is connected to the **IRIS CONTROL CIRCUIT** (18c).
 - AGC-Data Holding Circuit** (181), **ELECTRONIC-SHUTTER-Data Holding Circuit** (182), and **IRIS-Data Holding Circuit** (183) are part of the **DATA HOLDING CIRCUIT** (18d).
 - Automatic Exposure Control Circuit** (18e) and **Exposure-State Discriminating Circuit** (18f) are also part of the **EXPOSURE CONTROL CIRCUIT** (18).
- AE and Photometric Circuits:** The **AE DETECTOR CIRCUIT** (17) receives input from the **EXPOSURE STATE DISCRIMINATING CIRCUIT** (18f) and the **IMAGE INFORMATION MEMORY CIRCUIT** (123). Its output goes to a **PHOTOMETRIC AREA CONTROL CIRCUIT** (20).
- Position Selecting and Key:** The **PHOTOMETRIC AREA CONTROL CIRCUIT** (20) is connected to a **TWO-DIMENSIONAL POSITION SELECTING CIRCUIT** (21). An **EXPOSURE-CORRECTION EXECUTION KEY** (22) is also connected to the **EXPOSURE CONTROL CIRCUIT** (18).
- Output and Display:** The **CAMERA-SIGNAL PROCESSING CIRCUIT** (9a) outputs to a **VIDEO RECORDER** (10). The **EXPOSURE CONTROL CIRCUIT** (18) outputs to a **DISPLAY CIRCUIT** (19), which is connected to an **EVF** (11). The **EVF** (11) provides feedback to the **IMAGE SENSING DEVICE** (3) via a line labeled 4.

18 : EXPOSURE CONTROL CIRCUIT

FIG. 9

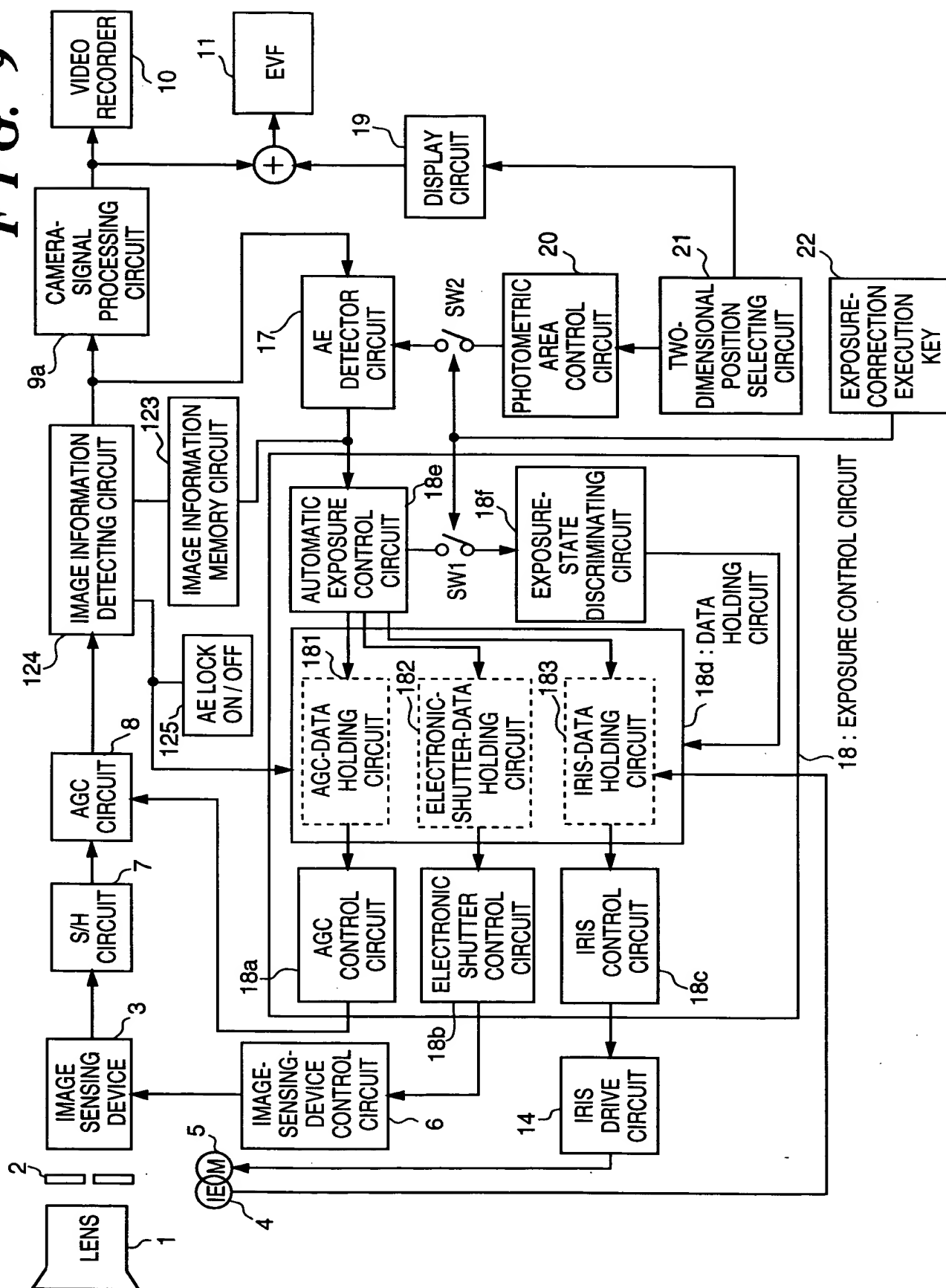
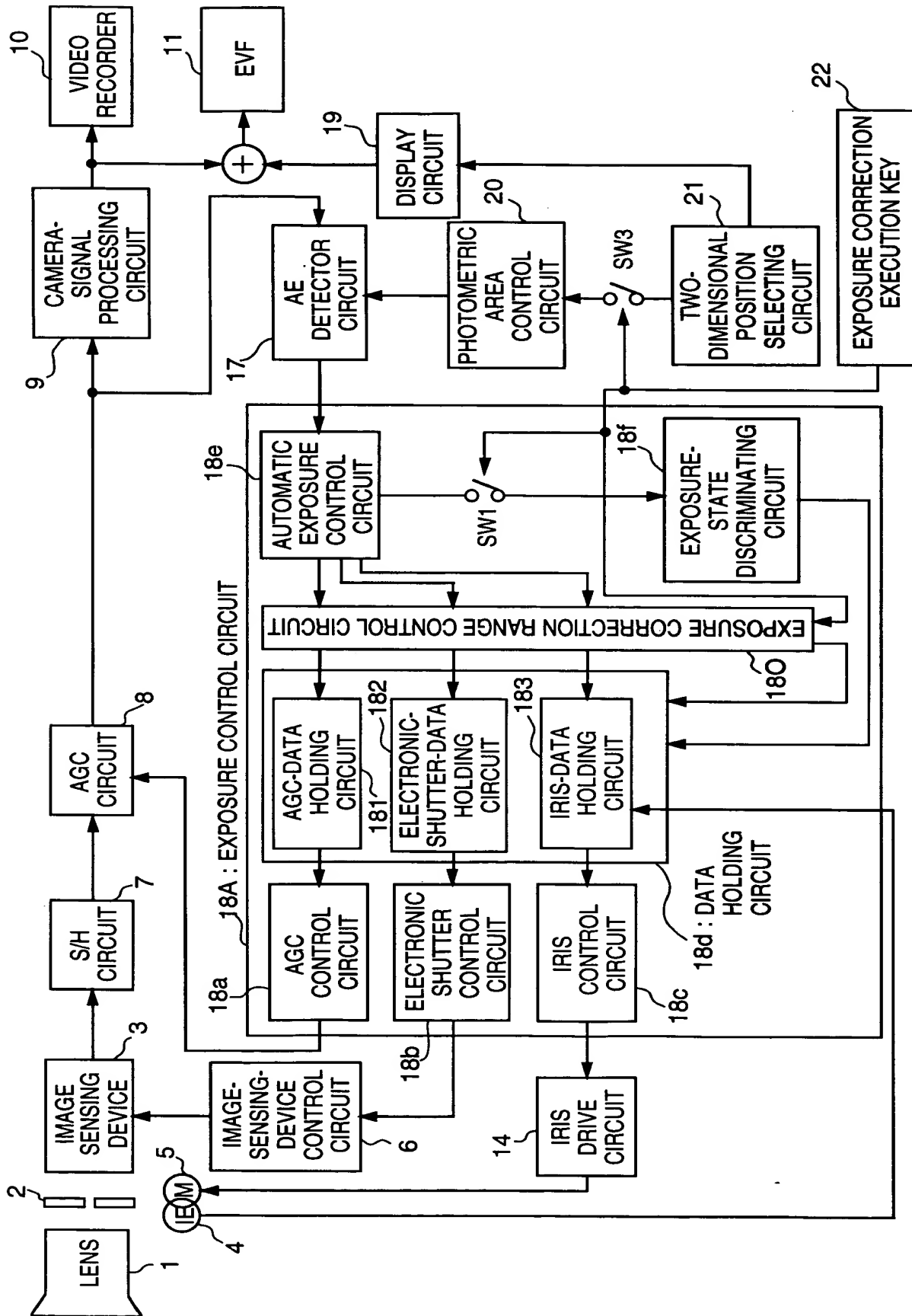


FIG. 10



The diagram illustrates a video camera system with the following components and connections:

- Input Stage:** A **LENS** (1) is connected to an **IMAGE SENSING DEVICE** (3) via an **IEOM** (4). The image sensing device is also connected to an **IMAGE-SENSING-DEVICE CONTROL CIRCUIT** (6).
- Signal Path:** The image sensing device (3) outputs to an **S/H CIRCUIT** (7), then to an **AGC CIRCUIT** (8), and finally to a **CAMERA-SIGNAL PROCESSING CIRCUIT** (109a).
- Processing and Conversion:** The camera-signal processing circuit (109a) includes an **A/D CONVERTER** and is connected to a **D/A CONVERTER** (109c). The D/A converter outputs to a **VIDEO RECORDER** (10).
- Control and Feedback:** The camera-signal processing circuit (109a) is also connected to an **EVF** (11) via a summing junction (+). The EVF output is fed back to the video recorder (10).
- Microcomputer (23A):** A central **MICROCOMPUTER** (23A) is connected to several control circuits:
 - AGC CONTROL CIRCUIT** (23a) and **AGC-DATA HOLDING CIRCUIT** (231).
 - ELECTRONIC SHUTTER CONTROL CIRCUIT** (23b) and **ELECTRONIC-SHUTTER-DATA HOLDING CIRCUIT** (232).
 - IRIS CONTROL CIRCUIT** (23c) and **IRIS-DATA HOLDING CIRCUIT** (233).
 - 23d: DATA HOLDING CIRCUIT** (23d).
- Exposure Control:** The microcomputer (23A) is connected to an **EXPOSURE CORRECTION RANGE CONTROL CIRCUIT** (23e). This circuit is also connected to an **AUTOMATIC EXPOSURE CONTROL CIRCUIT** (23f) and an **AE DETECTOR CIRCUIT** (23g).
- Photometric Area Control:** The AE detector circuit (23g) is connected to a **PHOTOMETRIC AREA CONTROL CIRCUIT** (23h).
- Switches:** Two switches, **SW1** and **SW3**, are connected to the automatic exposure control circuit (23f) and the photometric area control circuit (23h) respectively.
- Exposure State Discriminating Circuit:** An **EXPOSURE-STATE DISCRIMINATING CIRCUIT** (23i) is connected to the automatic exposure control circuit (23f) and the exposure correction range control circuit (23e).
- Two-Dimensional Position Selecting Circuit:** A **TWO-DIMENSIONAL POSITION SELECTING CIRCUIT** (21) is connected to the exposure correction range control circuit (23e) and the exposure state discriminating circuit (23i).
- Exposure Correction Execution Key:** An **EXPOSURE CORRECTION EXECUTION KEY** (22) is connected to the exposure correction range control circuit (23e).
- Display:** A **DISPLAY CIRCUIT** (19) is connected to the exposure correction range control circuit (23e) and the exposure state discriminating circuit (23i).
- Other Connections:** The exposure correction range control circuit (23e) is also connected to the AGC control circuit (23a), the electronic shutter control circuit (23b), and the iris control circuit (23c).

FIG. 12

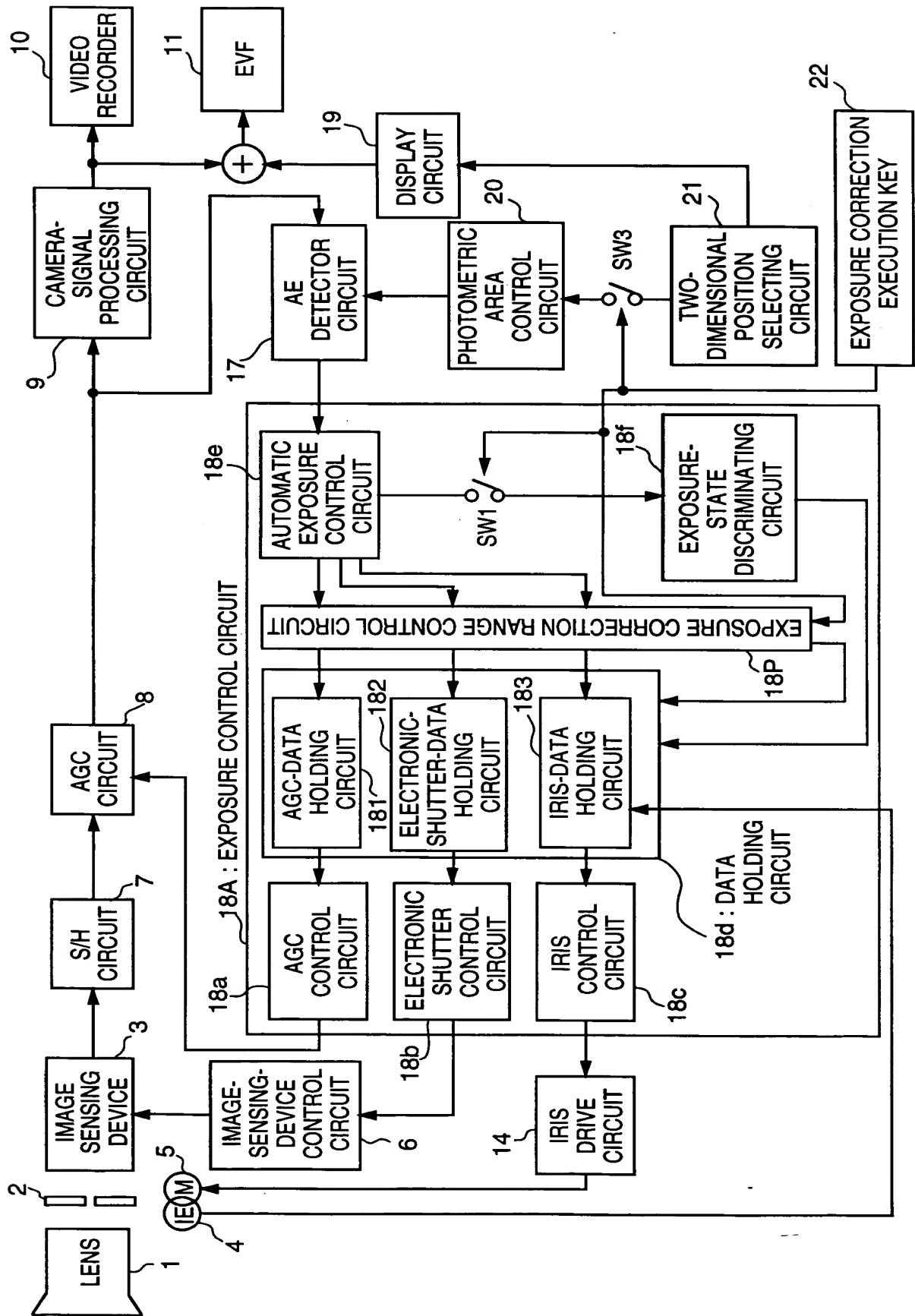


FIG. 13

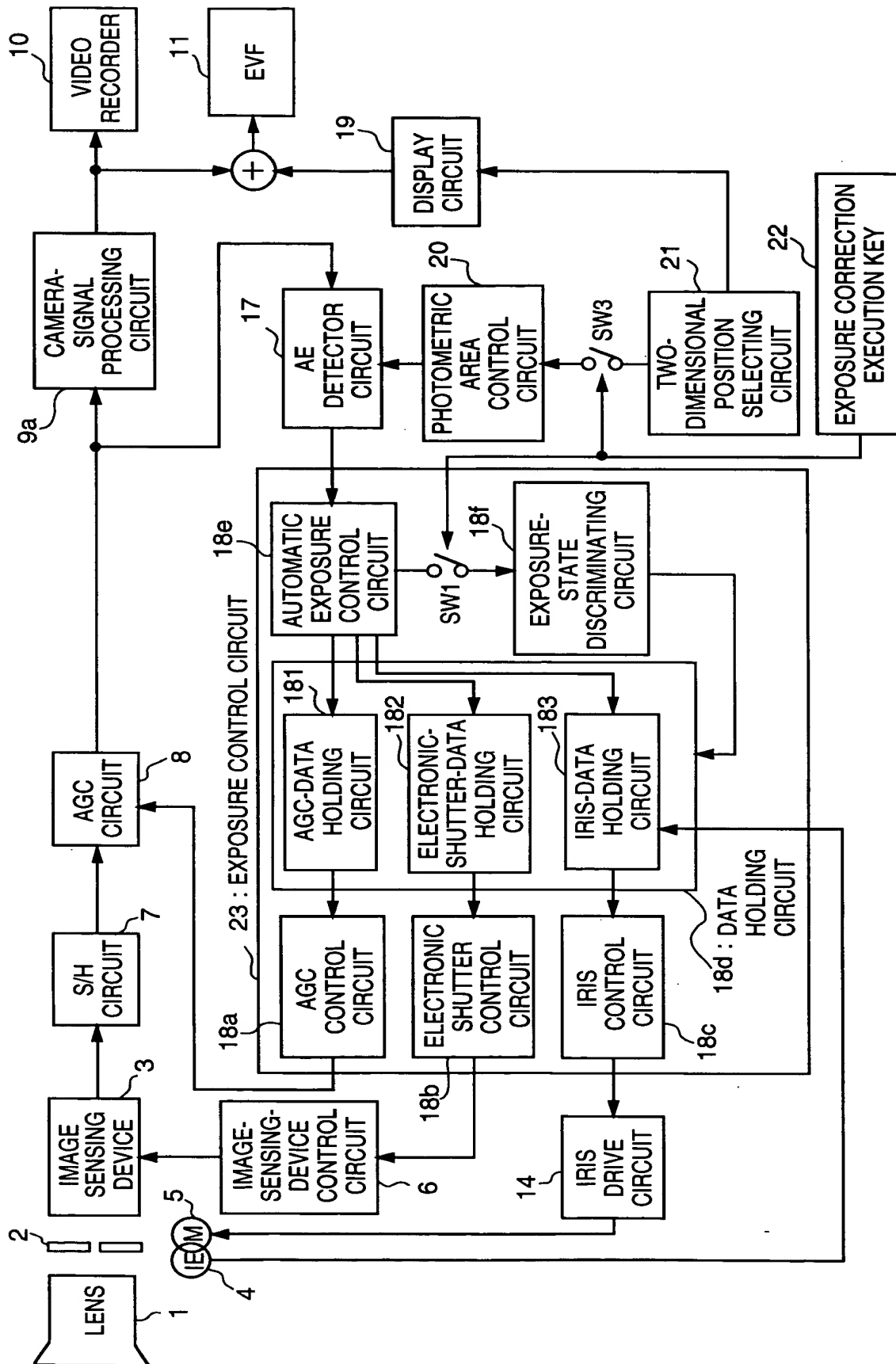
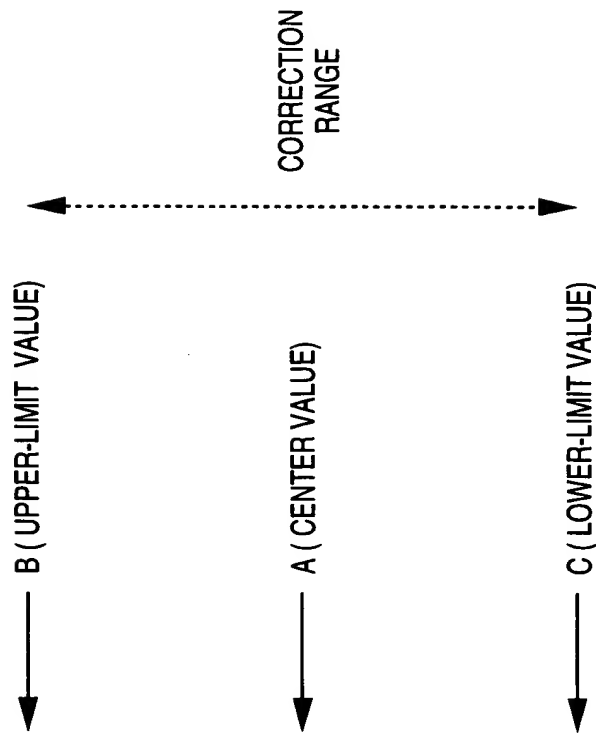


FIG. 14

DATA No.	IRIS DATA	AGC DATA	SHUTTER DATA
data1	OPEN	MAX	1/60
data2		18dB	
data3		12dB	
data4		6dB	
data5		0dB	
data6	F2.8		
data7	F4		
data8	F5.6		
data9	F8		
data10	F11		
data11	F22		
data12	F32		
data13			1/100
data14			1/250
data15			1/500
data16			1/1000
data17	CLOSE		



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